

Region as a transdisciplinary regionology object in the context of social management processes

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Abstract. The authors consider the evolution of approaches to the region based on their relevance in the processes of social management. The article describes culturally, historically, politically and economically oriented approaches, reveals their specifics, as well as the criticism of each of them from the standpoint of modern science. The experience of Russia, the USA, China, Japan, and other countries demonstrates the application of these approaches. The problem is consistent with the concept of transdisciplinary regionology, reflecting the latest trends in understanding the region as a complex object of social management, requiring the use of methods and tools of various sciences to provide new strategies for regional development and coordination of social processes in the region. In conclusion, the authors formulate the object and subject of transdisciplinary regionology, taking into account the evolution of approaches and modern scientific and social trends in understanding the region.

1 Introduction

The region as a research object in the Russian language is embedded in the name of regionology and almost all its schools and directions. However, the determination of its properties and parameters requires understanding of the evolution of approaches to this process, especially in connection with the intensification of interaction processes and the need for their critical understanding [1]. This is especially important in connection with the development of the transdisciplinary regionology concept, which should be understood as an integrative science, which studies the economical, geographical, cultural, historical, socio-political, linguistic, and other peculiarities of regions to identify patterns of regional development and interregional interaction and relies on a comprehensive theoretical and methodological base developed in the region research. In this article, we attempt to prove that it is the transdisciplinary approach that can give a modern answer to the problem of defining a region as a research object. At the same time, the evolution of approaches is inextricably linked with the processes of social management. Here we understand social management as a mechanism of influence, i.e. "a set of technologies, management tools, which provides a conscious, systematic, planned and purposeful influence of the subject of management on relations, processes, phenomena of social reality" [2]. And in the context of regional knowledge, we are primarily talking about both regulating the relations of the society of a particular region with unfamiliar societies, and managing interregional interaction.

2 Region as an object of research: the evolution of approaches to the definition

2.1. Approaches to the region definition

The region as an object was determined by researchers depending on the period of regional knowledge development (the pro-regional period, the periods of systematic and institutionalized knowledge) and the goals and objectives of social management that were relevant at that time. In general, the object remained tied to a "fulcrum" – a basic science or an interdisciplinary conglomerate, which was emphasized in a particular school (direction). This, in turn, was determined by the tasks of social management and how exactly this logical knowledge could help in solving these problems.

Among the most common approaches to defining a region as an object, the following are distinguished, arranged in the order of their appearance:

- 1) culturally and historically oriented;
- 2) politically-oriented;
- 3) economically-oriented.

2.1.1 *Culturally and historically oriented approaches to the region definition*

Such approaches may have different specifics (cultural, historical, lingua-cultural, ethnocultural, philosophical, etc.) and are among the quite common ones. If we consider them as the continuity of the regional knowledge formation, then these approaches can be

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called classical, i.e. the earliest, related to protoregionological knowledge and systematic (pre-institutionalized) regional knowledge: the collection of information about regions in different parts of the world was started with the study of their history, culture, philosophy, languages. At the time when economic and political factors were not so dominant, the cultural and historical specifics of the region defined it as an object of study. This was required for the society development: the study of another region to select philosophical doctrines, inventions, and ways of interaction that were important for society management. Based on these approaches, many world schools studied specific regions from the standpoint of history, philosophy, culture, and language. In the West and Russia, Oriental studies became an important scientific cluster: Western culture did not need such a thorough study, but the alien and largely incomprehensible Asia required serious research, which made it possible to strengthen the effectiveness of the processes of moving to the East.

Today, these approaches continue to develop and cultivate, but they are outdated and do not contribute to social development. This is also because classical approaches, studying a foreign region as a "thing in itself", often dissociate themselves from regional knowledge, especially in the part where it positions itself as socially and economically oriented, including those aimed at studying modern problems and contributing to the processes of effective management of social processes. For example, Russian orientalists often do not consider themselves to be regionologists, since they focus on a completely different problem than the one that is positioned by the leading regional schools of the world.

But this does not happen everywhere. In particular, in Japan, it is customary to include historical, cultural, philosophical, and linguistic studies of both the regions of the world and the regions of the country itself in regional studies as a significant and integral part. Korea makes considerable efforts to preserve and cultivate the national culture, modern cultural studies are put at the service of regional development, in particular in the field of promoting Korean culture through the drama and K-pop [3]. In addition, the totality of regional knowledge allows modern orientalists to build their philosophical concepts aimed at understanding the regional integration processes. An example is a work of Professor V.V. Malyavin "Eurasia and the World", in which the region as an object is represented as a metacivilizational community.

Thus, the earliest and pre-institutional approaches to the region as an object find new ways of development in modern regionology.

2.1.2 Politically-oriented approaches to the region definition

Among them are international-political, regional-political, etc. Such approaches for Western science can be considered the earliest since the appearance of

institutionalized regional knowledge; they became the next evolutionary step of previous approaches.

Area studies, which began to develop actively after the Second World War, made the nation-states their first object. And although the goal was a comprehensive study of other countries, this complexity was reduced to the main strategic function: understanding a potential enemy and how to make sure that he did not become a real enemy. Thus, an attempt to build a controlled and predictable interaction of Western society with other societies that are different is at the center of these approaches.

Area studies were defined by the French historian and political scientist Jean Durozel as a scientific study of a region representing a certain political and social unity, aimed at understanding and explaining its place and role in the international community. This result, according to the scientist, can be achieved only with the systematic use of all research areas that can provide valid explanations [4].

As for the United States and Europe, the idea of studying other countries and regions has been implemented before, but it was two world wars in such a short time that demonstrated how poorly the West knows its potential opponents. In particular, in 1947, a specialist in modern Japanese studies, Robert Hall, stated that two wars within one generation proved that the Western world should know more about other countries [5].

The US government raised the question about the growing need for specialists who deeply understand the organization of societies in other regions, their cultural specifics. Universities at that time could not provide state structures with such specialists, and therefore such programs began to develop the armed forces, creating the programs they needed at individual universities: a training program on civil issues and a Department for specialized training of military personnel [5].

An important task of studying the region as a political object was to clarify how educational programs on area studies can contribute to improving the international situation and preventing military conflicts. In particular, American anthropologist Julian Steward named the basic tasks: to provide society with practical knowledge about the most important regions of the world, to educate students and researchers in the spirit of cultural relativity, to promote understanding of social and cultural regional systems and the development of social sciences [6].

After that, the political orientation of the region as an object was strengthened by the beginning of the Cold war. In 1948, R. Hall wrote a report for the Social Sciences Research Council, asking for assistance in the institutionalization of area studies. He believed that this would not only help to increase the importance of interdisciplinary research and establish closer ties within the socio-humanitarian sciences but also help to solve very important political tasks, in particular, to strengthen the relevance of the humanities and foreign language studies in a rapidly changing world, as well as to ensure the national interests of the United States in the global fight against the communist threat [7].

In a review of 75 departments of political science for 1952, it is indicated that 300 of 800 research projects carried out at that time were devoted to the study of international relations problems, and 200 of them belong to the field of area studies. The State Department survey for 1960 recorded 109 research projects, the object of which was foreign regions and their societies (a significant part of them was focused on the study of the Soviet Union and Eastern Europe, much less – on Asia, Africa, and the Middle East, since there was a shortage of specialists). The vast majority of these studies were conducted at universities, but several projects related to the activities of private research groups, for example, the Council on International Relations and the Foundation of the XX century [8].

Thus, initially, area studies were aimed at the region as an object with original culture and socio-political unity, which dictated the need for an interdisciplinary approach. At the same time, the forces that determined the policy of the region concerning other countries can be designated as the subject of study at that time [8].

An interesting phenomenon is that by the time the United States realized after the Second World War that it needed to study the alleged opponents, there were countries for which the results of the same war set the opposite vector. Japan, which since the middle of the XIX century had been building its regional knowledge with political goals in line with the study of other countries to overcome backwardness and create a colonial empire, after the defeat changed its direction towards cultural and socio-economic research.

In Russian science, the consideration of the region as an object in the international political context, i.e. the study of regional spaces in the context of interstate interactions, has also been developed, in particular, within the framework of the world integrated regional studies (A.D. Voskresensky). The research field of this direction is directly related to the formation of regional spaces that "refract global processes in their way and generate specific types of international interaction" [9].

The regional component in international relations is the subject of research, in particular, within the framework of the approach proposed by V.A. Dergachev and L.B. Vardomsky. This approach is described in their work "Regional Studies" (2010); it has become widely used in Russian science. In regional studies, V.A. Dergachev and L.B. Vardomsky emphasize the complexity and systematic approach. The object of regional studies, in their opinion, is regional groupings, countries, and their regions as subjects of international and interregional relations [10]. The presented approach actively uses the geopolitical and civilizational approaches characteristic of the international relations theory.

Thus, both the world complex regional studies and the V.A. Dergachev and L.B. Vardomsky approach tend to the field of international relations. Both directions can be considered as a representation of the regional cross-section of international relations. Such approaches are seen as productive in terms of studying regional processes, but we believe that being actually in the field of the theory of international relations, they require

permanent alignment and adjustment with its methodology and paradigmatic framework.

2.1.3 Economically oriented approaches to the region definition

Among them are socio-economical, economic, geographical, etc. Currently, these approaches are very relevant, which characterizes the transition in the social management processes: from political methods to socio-economic ones.

In the domestic regionological knowledge, they were manifested in the XX century: the district school of N.N. Baransky, the socio-economic regional studies of I.A. Vitver, the complex problem regional studies of Ya.G. Mashbits, as well as in some modern theories. In foreign directions, such approaches were implemented, first of all, in the regional science of W. Izard, including its branches in other countries.

In the socio-managerial dimension, the problems of uneven regional development, the imbalance of socio-economic potentials of regions, the interrelation of internal interregional relations and interethnic space, as well as external, global interregional relations and national space, the interaction of the Center and the periphery are key problems in the research field of the Russian school of spatial economics. An important issue that, in our opinion, has not received adequate attention so far is the issue of interaction between the Russian regions and neighboring foreign countries (the issues of interaction between the Russian Far East and China, Japan, the East Siberian region, and China, Mongolia, etc. are relevant). This problem is also included in the agenda of the spatial development school. We believe that this area requires more coverage in both domestic and foreign literature.

The Russian school of spatial development is characterized by a practical focus on regional development issues, which involves the analysis and interpretation of observed trends, forecasting, and making recommendations on strategic planning and implementation of state social and socio-economic regional policy. The applied orientation of regional economics school under the leadership of A.G. Granberg can be described as the development of integrated strategies for spatial development of Russia. At the same time, as it should be in strategic management, the field of consideration goes far beyond the economy and appears as a complex, integrated view.

In the last twenty years, long-term strategies have been the program documents of regional socio-economic development in Russia and the world. The development of such strategies is carried out by a wide range of leading experts and requires the conceptualization of the accumulated knowledge about the region in general and the specific region (the object of strategic management) in particular, as well as a deep, comprehensive understanding of territorial development processes.

Although A.G. Granberg school of spatial development is primarily economically oriented, the problem field studied by the school includes issues that

extend far beyond the purely economic approach. We are talking about comprehensive interaction between the regions of the country, as well as the interaction between Russian regions and the world, between the federal center and the periphery, as well as many other geopolitical, institutional, social, ethnic, and mental aspects.

Thus, we can observe how economic approaches to the region as a research object within the framework of various domestic regional schools at all stages of their evolution tended to be complex and integral, trying to overcome the boundaries outlined by a purely economic reference point, but remaining disciplinary-oriented.

As for the regional science of W. Izard, it was repeatedly positioned as multidisciplinary, including by Izard himself, but in practice, this direction did not manage to get away from economics as basic science.

It should be assumed that W. Izard himself was strongly influenced in this regard by the concepts of the German school of spatial analysis. According to the theory of central places by V. Kristaller and A. Lösch, regions can be defined as hierarchical systems of central places or cities. This idea of the region as an economic object in a sense determined the further development of the object-subject sphere of regional science.

By the end of the XX century, the region finally consolidates the established status of an object of economic research, more and more new approaches are being identified. In terms of a spatially independent or "nodal" labor market [11], supplemented by the concept of polycentric regions with nodal points and peripheral zones are in close functional integration [12] and the concept of a "functional economic zone" by economist Karl Fox. This concept expanded the subject field of regional science, explaining the dominance of the central node over the periphery by the spatial dependence of the labor force on nearby employment centers [13]. In addition, it made it possible to determine the boundaries of economic zones not in terms of geographical units, as it was earlier but based on functionally integrated labor markets, which is directly one of the important factors in regulating social processes.

Regional science has provided the sphere of social management with quite a lot of tools. In particular, in the political and administrative sphere, the US Census Bureau uses the pendulum migration model to determine the boundaries of municipal statistical areas, with the exception that these boundaries coincide with administrative, and not with the boundaries of pendulum zones [14]. Richardson points to "planning regions", which just coincide with the units of political or administrative control [12]. This approach allows us to study the results of the implementation of development strategies within the specific borders of administrative regions.

Similarly, regions were also determined by various factors: the population income, based on the sectoral labor force, natural resources, regional ecological systems, geographical factors [14]. At the same time, socio-economic development and the coordination of this development remained the main research subject, no matter how the region was interpreted.

Following the American experts in the field of regional science, guided by their needs, China also put the economy in the first place when describing the region as an object [15], but focused on the study of specific problems of regional development in the PRC. In 1991 the Chinese Association of Regional Science was established in China [16], they translated American regionologists' works, in particular, W. Izard, and studied the experience of increasing productivity and economic growth of other countries [17].

Professor Yang Kaizhong, one of the founders of regional science in China who currently heads the association [16], believes that the science of the region is connected with the regional economy, and therefore it is included in the profile of economic sciences, studies human activity from the standpoint of spatial division. Yang Wuyang and Zhang Xiandong, who also stood at the origins of the regional science in China, argue that the science of the region studies the regional system as a whole, but distinguishes its elements such as social, economic, geographical, and historical origins of the region. Jing Yujun and Wang Shengjin believe that regional science is designed to study regional economy as a spatial form of expression of regional economic activity [15].

The economic orientation of Chinese approaches is determined by several factors. Among them are not only the initial vector of the American regional science on the socio-economic sphere and the influence of the ideas of spatial analysis (works on the spatial analysis concept were published in the PRC back in the 1980s, in particular, we can note the "Spatial Analysis of Economic Activity" [18] by Chen Zongxing, who, in addition, was the translator of the Introduction to Regional Science by Wu. An important factor is quite strict control over the scientific sphere by the state and, as a result, the need to follow the main course – building an efficient and rapidly developing economy. This is generally consistent with the government's policy aimed at social management as a tool to prevent the risks of social unrest, in which, according to the Chinese authorities, economic factors play a rather serious role. Attention to the implementation of the coordinated development strategy of the regions was also attracted at the XIX Congress of the Communist Party of China, where this strategy was tied to a new political course – socialism with Chinese characteristics in the new era, proposed by Xi Jinping [19]. In addition, regional science, as a discipline that came to China from the West, had to defend its positions, and the only correct strategy could be a utilitarian approach that allows making a significant contribution to the socio-economic development of the country: it was the actual agenda in the 1990s when regional science came to China.

All this determined the subject field of Chinese regional science, which included the problems of the regional economy and regional policy, the imbalance of regional development [20], the introduction of innovations in the regions [21], uneven economic growth in the regions [22]. In addition, Chinese regionologists were engaged in "regional economic development strategies, a comprehensive assessment of the regional

policy of the People's Republic of China after 1978, regional economy in border areas, industrial agglomeration and industrial clusters in the People's Republic of China, regional development and economic geography, interregional relations, regional trade and cooperation, the impact of urbanization processes on regional development, global cities of the People's Republic of China and urban agglomerations, urban sustainable development and urban competition, industrial transformation and modernization in the conditions of urban economic development, improving the quality of regional development and coordinated development of regions, new requirements, models and ways to promote the qualitative development of the region's economy, creating a more effective new mechanism for regional coordination and development in the People's Republic of China, building a modern economic system and qualitative development of the regional economy in China" [15], all that ensures coordinated and effective social management.

To develop this subject field, new approaches were proposed: the theory of enriching the state with scientific technologies [23], the strategy of China's economic development in the XXI century [24], the theory of regional cooperation [25], the application of regional science theories to Chinese realities [26], etc.

The Japanese branch of regional science was no exception: it was this branch that, of all the numerous areas of Japanese regional research, was most actualized on the region as an economic, geographical, and socio-economic object. Analyzing the most relevant problems of regional science in Japan by decades based on regional journals, H. Kim and F. McCann note the following trends.

In the 1960s, the topics of unbalanced regional growth, the distribution of public investment, the placement of enterprises, and internal migration were most often touched upon. In the 1970s the location of residential areas, income inequality, urban congestion, transport opportunities, industrial agglomeration, urban growth, and land use, the "rank-size" rule (Zipf's rule), gravitational models, and cost-benefit analysis.

In the 1980s the housing market, spatial agglomeration, land use equilibrium, input-output problems, linear programming, hedonic models, and general equilibrium analysis. In the 1990s the optimal size of cities, spatial structures, the subcenters formation, city systems, urban transport, land taxation. In the 2000s urban labor markets, urban and regional studies, new economic geography. In the 2010s overcoming the consequences of natural disasters, as well as urban and regional studies [27].

Thus, it should be stated that the definition of a region as an object of regional knowledge at all stages of its development met the tasks of regional social management and was guided by the real state of affairs in this area.

2.2 Transformation of approaches to the region as a research object at the present stage

The understanding of the region as a complex and multilevel phenomenon, the integral study of which is impossible in a strictly disciplinary framework, is increasingly emerging in scientific and public circles.

Thus, by the mid-90s of the XX century, critics of W. Izard regional science require a full-fledged understanding of the region. Thus, Roger Bolton and Ann Markusen call for "introducing" the region into regional science. Economist R. Bolton writes that regional science is too abstract and does not allow studying real-world regions. In his opinion, places in regional science are anything but real places, real communities in their natural, historical and cultural environment. If scientists do not have an understanding of places, then they are not able to study spatial relationships – networks flow, balancing forces – all that make places a single whole [28].

An integral approach to understanding the region was expected from regional science at the very first stages of its development, according to Ann Markusen, director of the project on regional and industrial economics at Rutgers University. At that time, it seemed that regional science was able to overcome the established framework of social sciences and offer a new, integrated vision of the problem. When defining a region, she tries to find a middle ground between abstractness and a narrow economic approach: in her opinion, it is "a historically formed, geographically adjacent community with a physical, socio-economic, political and cultural environment and a spatial structure that differs from other regions and other large territorial units, cities and countries" [29].

According to A. Isserman, regional science still has not found its regions [28]. The reason, he believes, is that in many studies the region does not have a real location, and it is not an object itself, since only individual parts are taken from it. This, according to the scientist, indicates that regional science does not consider real regions and refuses to accept the subject of science as a subject of research [28].

The awareness of regionology as a multidisciplinary field has not passed China either. In search of mechanisms for effective social management in the regions, the Chinese government initiated scientific work to determine the causes of uneven development of the regions of the People's Republic of China and to overcome this imbalance. Chinese scientists have put forward several approaches that required the involvement of specialists and tools from many scientific disciplines. Natural-geographical, historical, cultural, economic, and legal factors were analyzed [15]. Leading regional economists, in particular, Ma Hong, who is considered the founder of Chinese economic theory, was also a proponent of the interdisciplinary approach. He made attempts to comprehensively comprehend the policy of "socialism with Chinese specifics" – the connection of the socialist system with the market economy – and its impact on regional development in the works "On the new strategy of China's socialist economic development" [30], "Reforms and development of the Chinese economy" [31], "The structure of the economy and economic management"

[32], "Commodity economy in the conditions of the socialist system" [33], etc.

Currently, complex integrated approaches to understanding the region and effective management of social processes in it are developing in two different trends. The first trend is attempting to define regionology not as a scientific branch, but as a set of studies based on projects carried out in different sciences. This typical concept for example, for regional studies, allows us to define a region as an object from a variety of paradigmatic settings of individual sciences. The second trend is the growing need to define an object within the framework of regionology as science without mono- or dominant-disciplinary binding: an example is the multidisciplinary multi-paradigm approach of I. N. Barygin, as well as all other approaches that tend to increasingly transdisciplinary of Regionology [34].

3 Conclusion

The latest trend in the study of the region as an object is the further awareness of its complexity, as well as the complexity of processes that need to be coordinated within the "tangle" of regional processes.

Based on the above provisions and the integral function of transdisciplinary regionology, a region can be understood as a conditionally allocated territory by a researcher, acting as an object of study within the framework of a specific study. At the same time, taking into account the requirements of those scientists who believe that a region with objective characteristics should be considered, it becomes necessary to introduce the concept of gradation of region conditionality. This gradation can be reduced to zero – then a politically and administratively existing unit is chosen as a region (regional studies of the Irkutsk Region, regional studies of Russia, regional studies of the European Union, etc.). Or it can be brought to maximum, at which the researcher himself chooses which features will unite the territory they have chosen into a conditional region: "Chinese" markets as an assembly point of urban space [35] or the regions of the Great Tea Way [36]. Between these two points, there will be regions of varying degrees of conditionality, united by various characteristics: adjacent geographical location (Asia-Pacific region, Siberia and the Far East, etc.), common historical, cultural, ethnic, and other characteristics.

As for the subject of regionology, based on the level of research, its goals, and objectives, the following phenomena and processes can be the subject:

- 1) economic, political, social, cultural, historical, linguistic, and other specifics of the region;
- 2) patterns and factors of regional development;
- 3) processes of interregional interaction in all their diversity;
- 4) strategies and forecasts of regional development and interregional cooperation.

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